

WHAT IS CLAIMED IS:

1. An apparatus for transporting a dust free article in a container between a low cleanliness room and a high cleanliness room, including a loader and a container, which comprises:

(a) said loader disposed within said low cleanliness room in a border between said high cleanliness room and said low cleanliness room, which opens and removes a cover of said container for transporting said dust free article between said low cleanliness room and said high cleanliness room, which comprises:

(a1) a stage for mounting said container holding said dust free article therein;

(a2) a driving device for moving said container mounted on said stage to and from a door of said loader in horizontal direction,

(a3) said door for opening and closing an opening portion through which said dust free article is transported between said container and said high cleanliness room;

(a4) unifying means for unifying said cover of said container and said door of said loader;

(a5) a driving mechanism portion for vertically moving simultaneously said cover unified with said door; and

(b) said container which comprises:

(b1) means for fastening said container on said stage,

(b2) an opening port through which said dust free article is transported between said container and said high cleanliness room; and

(b3) said cover of said container, which is to be unified with said door of said loader and is moved vertically downward to open and close said opening port of said container.

2. The apparatus as claimed in claim 1, wherein said unifying means of said loader for unifying said cover and said door further comprises:

(a) a first pin to be inserted in a first hole formed in a frame of said cover;

(b) a second pin to be inserted in a second hole formed in said door; and

(c) a driving device for simultaneously moving both of said first pin and said second pin to unify said cover and said door.

3. The apparatus as claimed in claim 1, wherein an angle between an outward normal line on a surface being formed by contact of said cover of said container with said container and a descending direction of said cover unified with the door of said loader is an acute angle.

4. The apparatus as claimed in claim 1, wherein said container further comprises a sealing material for closing a gap between said cover and said opening port of the container.

5. The apparatus as claimed in claim 1, which said container further comprises a positioning means to position itself when it is mounted on said loader.

6. The apparatus as claimed in claim 1, wherein said container further comprises a handle to support itself for transportation.

7. The apparatus as claimed in claim 1, wherein said container further comprises a protrusion formed on an outer portion of said cover, said protrusion having a hole to which a pin is inserted for unifying said cover and said door.

8. The apparatus as claimed in claim 1, wherein said container further comprises a hole formed on outer frame of said cover, into which a pin is inserted for unifying said cover and said door.